

# THE MINERAL INDUSTRY OF NAMIBIA

By Philip M. Mobbs

Diamond remained the most economically significant mineral commodity produced by the mining industry of Namibia; zinc and uranium ranked second and third. Namibia, which is located on the southwestern coast of Africa between South Africa and Angola, was the world's sixth leading producer of uranium and seventh ranked gem diamond producer. Other mineral production included copper, fluorite, gold, lead, salt, silver, and stone (Olson, 2005; World Nuclear Association, 2005<sup>1</sup>).

In 2004, the 825,418-square-kilometer (km<sup>2</sup>) country had an estimated population of 2 million. Based on purchasing power parity estimates published by the International Monetary Fund (2005<sup>2</sup>), the gross domestic product (GDP) was \$13.35 billion in 2004, and the GDP per capita was about \$6,440.<sup>2</sup> The real GDP growth rate was 4.2%, and inflation dropped to 4.1% in 2004 from 7.2% in 2003 (World Bank Group, 2005<sup>2</sup>).

## Government Policies and Legislation

The Government's 2003 minerals policy was designed to ensure the sustainable contribution of minerals to the socioeconomic development of Namibia. The Ministry of Mines and Energy was responsible for making and enforcing policies related to minerals and energy. To develop the mining sector, the Ministry of Trade and Industry (2003<sup>3</sup>) actively promoted foreign investment opportunities.

The basic mining law was the Minerals (Prospecting and Mining) Act of 1992. The Ministry also published mine health and safety regulations. The Diamond Act of 1999 regulated and controlled the holding, transport, and processing of diamond. Petroleum exploration and development were regulated by the Petroleum (Exploration and Production) Act of 1991, the Petroleum (Taxation) Act of 1991, the Petroleum Laws Amendment Act of 1998, and associated regulations.

In April, much of the Sperrgebiet in southwestern Namibia was proclaimed to be a National Park by the Cabinet. Because the new park, which covered an area of about 26,000 km<sup>2</sup>, had been a restricted diamond mining area since the late 1920s, there had been little development of the area (Namdeb Diamond Corp. (Pty) Ltd., 2005, p. 31).

## Production

During 2004, mineral production results were mixed (table 1). Notable developments included an increase in mine and quarry production of marble (about 85% compared with 2003 production), uranium (49%), diamond (35%), fluorspar (32%), and zinc (14%), and a decrease in lead (13%), dolomite (12%), and gold (12%). Arsenic trioxide recovery increased by about 225% in 2004 compared with 2003.

De Beers Marine Namibia (Pty.) Ltd.'s offshore operations and the initiation of production from Namdeb Diamond Corp. (Pty.) Ltd.'s Pocket Beaches (Site 2), which is located about 120 kilometers (km) north of Oranjemund, accounted for a significant proportion of the increase in diamond production in 2004. Because of the strength of the Namibian dollar relative to the U.S. dollar and uranium sales were denominated in U.S. dollars, Rössing Uranium Ltd. attempted to counter the adverse effect on domestic income after conversion of U.S. dollar income into Namibian dollars by ramping up uranium production in 2004. Namzinc (Pty.) Ltd.'s Skorpion zinc refinery completed its first full year of production in 2004. Zinc metal production increased by 154% in 2004 compared with 2003 when the refinery initiated production.

## Trade

According to the Bank of Namibia (2005, p. 24-25), the merchandise trade deficit declined by about 49% to \$278 million in 2004 from about \$540 million in 2003. Total merchandise exports in 2004 were valued at about \$1.83 billion, of which diamond accounted for \$824 million (45% of total exports); manufactured products, which included processed zinc, \$431 million (24% of total exports); and other mineral commodities, such as copper, gold, uranium, and unprocessed zinc, about \$228 million (12% of total exports).

Higher international metals prices influenced the appreciation of the Namibian dollar, which was pegged to the South African rand. In 2004, the Namibian dollar appreciated by 14.6% against the U.S. dollar, which followed a 19.8% appreciation in 2003. Similar to the minerals economy of South Africa, the exchange rate differential led to the reduction of local currency obtained from U.S.-dollar-denominated mineral commodity export sales and had a negative impact on mining operations in Namibia that exported U.S.-dollar-denominated minerals.

<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

<sup>2</sup>Where necessary, values have been converted from Namibian dollars (N\$) to U.S. dollars (US\$) at the rate of N\$6.45=US\$1.00 for 2004 and N\$7.57=US\$1.00 for 2003.

## Commodity Review

### Metals

**Copper.**—Ongopolo Mining and Processing Ltd. operated the Tsumeb copper smelter and the Kombat and the Otjihase copper-lead-silver mines in 2004. Ongopolo proposed to open a copper refinery at Tsumeb and to reopen the Matchless Mine, which had closed in 1983.

The Haib copper prospect had been extensively evaluated before being put on hold in 1998 because of unfavorable market conditions. Subsequent ownership disputes were effectively resolved in 2004 when the Government issued exclusive prospecting license (EPL) No. 3140, which included the Haib deposit, to Deep South Mining (Pty) Ltd. of Namibia. Afri-Can Marine Minerals Corp. of Canada subsequently began negotiations to obtain a 70% interest in the EPL.

**Lead and Zinc.**—Subsidiary companies of Anglo American plc completed their first full year of production from the Skorpion Mine and solvent extraction-electrowinning (SX-EX) zinc refinery. Skorpion Mining Co. produced 1.3 million metric tons (Mt) of ore from the mine. In 2004, the 150,000-metric-ton-per-year-capacity SX-EX plant of Namzinc processed 1.2 Mt of ore and produced 119,200 metric tons (t) of zinc. The Skorpion deposit, which is located approximately 85 km northeast of Oranjemund and 25 km north of Rosh Pinah, had been discovered in 1976, but interest in the project flagged by 1982 because of the technical difficulties associated with the processing the oxide ore. Reunion Mining Plc acquired an interest in the deposit in 1996 and subsequently developed a viable processing procedure. In 1998, Reunion completed a bankable feasibility study, and in 1999, Anglo American acquired Reunion. Mine construction began in 2000, and initial production from Skorpion, in 2003. The expected mine life is 15 years (Anglo American plc, 2005, p. 117; Tassell, 2005).

Rosh Pinah Zinc Corp. (Pty) Ltd. (a joint venture of Kumba Resources Ltd. of South Africa, 89.5% interest, and PE Minerals Namibia (Pty) Ltd., 10.5%) operated the Rosh Pinah underground zinc mine. In 2004, Rosh Pinah increased production of zinc concentrates by 15% to about 124,000 t. Production of lead concentrates decreased by about 13% to about 27,000 t. Zinc concentrates were shipped through Walvis Bay to Kumba's Zincor refinery in South Africa for treatment (Kumba Resources Ltd., 2005, foldout after p. 1).

**Gold.**—AngloGold (Pty) Ltd. of Namibia (a subsidiary of AngloGold Ashanti Limited of South Africa) held a 100% interest in the Navachab open pit gold mine near Karibib. The Navachab Mine had the capacity to treat 1.32 million metric tons per year (Mt/yr) of ore. The mine accounted for more than 90% of national gold output. In 2004, the mine's production was about 2,080 kilograms (kg) compared with 2,298 kg in 2003 and about 2,650 kg in 2002. The decrease was attributed to lower ore throughput and lower recovery grades. The mill processed stockpiled ore for the first half of 2004 as the mine transitioned to owner mining from contract mining. Production was expected to increase in 2005 (AngloGold Ashanti Limited, 2005, p. 43-44).

Bafex Exploration (Pty) Ltd. of Namibia held eight exclusive prospecting licenses in northwestern Namibia. In 2004, Bafex was acquired by Helio Capital Corp. of Canada, which was renamed Helio Resources Corp. Bafex initiated exploration on the Leicester and the Zebra licenses. Boulder Mining Corp. of Canada, which was earning 100% interest in the copper-gold Teverede prospect from Bafex, continued exploration at Teverede.

**Tantalum and Titanium.**—Reefton Mining NL of Australia explored the tantalum resources at the Sandamap pegmatite on its Erongo license in central Namibia and the sampled heavy minerals associated with the diamondiferous gravels in the Mowe Bay sector of its Skeleton Coast Diamond Project in northern Namibia.

**Uranium.**—In 2004, Rössing, which was owned by Rio Tinto plc of the United Kingdom with a majority interest of 68.6%, produced 3,582 t of uranium oxide ( $U_3O_8$ ) from about 11 Mt of ore and removed an additional 8.1 Mt of waste rock from the open pit. Despite higher demand, which resulted in a 49% increase in production from 2,401 t of  $U_3O_8$  in 2003 and higher international uranium spot-market prices, Rössing posted a financial loss in 2004 primarily because of exchange rate losses. Most of the uranium oxide, which was exported under long-term contracts to Europe, North America, and Southeast Asia for use in generating electricity in nuclear powerplants, was sold for U.S. dollars, which were converted to Namibian dollars for payment of local expenses. To offset the negative impact of a weak U.S. dollar, Rössing planned to increase output to about 3,800 t in 2005. The increased production would allow the company to cover its long-term contracts and to sell surplus production on the spot market, which had risen to about \$10 per kilogram in 2004 compared with about \$3 per kilogram in 2000 (Rössing Uranium Ltd., 2005a\$, b\$).

With fast depleting reserves, the mine's projected remaining 3-year life provided impetus for a feasibility study on the development of the Phase 2 area, which is located west of the existing (2004) open pit. Projected excessive waste volumes in the Phase 2 area resulted in Rössing directing its focus to the development of an area southeast of the existing mine, which could extend the mine's life another 2 years.

In 2004, Paladin Resources Ltd. of Australia began a bankable feasibility study on the development of the Langer Heinrich open pit uranium mine. The Langer Heinrich deposit, which is located about 80 km northeast of Walvis Bay, had been discovered in 1973 and evaluated for several years by the General Mining and Finance Corp. (Gencor) of South Africa before being set aside because of low uranium prices (Paladin Resources Ltd., 2004, 2005).

## **Industrial Minerals**

**Diamond.**—Namdeb, which was established in 1994 as a joint venture between De Beers Centenary AG (50%) and the Namibian Government (50%), was the country's leading diamond producer. During 2004, Namdeb, its contractors, and its subsidiaries produced 1.9 million carats, of which 840,000 carats was from the offshore mining operations of De Beers Marine Namibia, which was a Namdeb associated company. In April 2004, Namdeb began production from Pocket Beaches (Site 2). Namdeb commissioned the \$50 million expansion of its Elizabeth Bay operations in July, and officially inaugurated the new contractor treatment facility (CTF) in Lüderitz in August. The CTF plant would process diamondiferous gravel concentrate produced by Namdeb's beach and marine contractors. Namdeb expected that the contractor output would increase to 30,000 carats by 2006 from about 20,000 carats in 2003 (Namdeb Diamond Corp. (Pty) Ltd., 2005, p 18, 22-24, 34; Katsawara, 2004\$).

In 2004, the Government and Sakawe Mining Corp. (Samicor) (a subsidiary of LL Mining Corp. BV, which was a member of the Leviev Group of Israel) concluded a mining agreement that covered the mineral rights formerly held by the bankrupt Namibian Minerals Corp., and Samicor began offshore production operations. The Leviev Group also established LLD Diamonds Namibia, which was a cutting and polishing factory in Windhoek. Samicor was to provide all the diamond that it produced offshore Namibia to LLD Diamonds for processing. Other diamond-cutting facilities in Namibia processed imported stones.

Diamond Fields (Pty) Ltd. of Namibia (a subsidiary of Diamond Fields International Ltd. of Canada) formed a 6-month joint-venture operation on Mining Lease 111, which is located offshore Lüderitz and included the Marshall Fork and the Diaz 12 marine deposits, with Samicor Mining Services (Pty) Ltd. (a subsidiary of Samicor). The joint venture produced 52,826 carats before production was suspended in October when Diamond Fields purchased and began to rehabilitate the MV Diamond Fields Discover. Diamond Fields expected to operate the MV Diamond Fields Discover and to resume offshore diamond production in 2005 (Diamond Fields International Ltd., 2004).

In addition to diamond production, companies were actively exploring for diamond in Namibia in 2004. Afri-Can Marine Minerals Corp. of Canada continued exploration work on the Woduna area of offshore block J, which is located north of Hottentot Bay. In January 2004, Afri-Can also agreed to acquire a 75% interest in the Gibeon kimberlite field in south-central Namibia (Afri-Can Marine Minerals Corp., 2004\$).

Motapa Diamonds Inc. continued exploration of the onshore Kaudon and Kavango diamond licenses in northeastern Namibia. Mount Burgess Mining N.L. of Australia continued drilling on its Tsumkwe diamond prospect. Sonnberg Diamonds (Pty) Ltd. (a subsidiary of Namibian Resources PLC of the United Kingdom) contract mined the Pomona license for Namdeb. In 2004, Sonnberg acquired, completed an environmental impact assessment, and stockpiled 35,000 t of diamondiferous gravel on the adjacent Saltztal license. Namibian Resources expected that a new dense-media separation unit would begin production on the Saltztal license in January 2005 (Namibian Resources PLC, 2004).

Storm Diamond Mining (Pty.) Ltd. of Namibia (a subsidiary of Reefion Mining NL of Australia) continued exploration of the beaches along the Skeleton Coast of northern Namibia. In 2004, Storm trenched beach terraces. Bulk samples were processed with Storm's screening plants, a dense-media separation plant, and x-ray sorting system. The company has recovered 2,629 diamonds that weigh 494.4 carats since exploration was initiated in 2002 (Reefion Mining NL, 2005, p. 3).

## **Mineral Fuels**

Namibia, which had no domestic production of coal, gas, or oil, was import-dependent for most of its energy needs. The hydroelectric dam at Ruacana provided 249 megawatts (MW) of power, and an additional 600 MW was imported from South Africa under arrangements, which were to expire in 2006, with Eskom Ltd. and the South African Power Pool. The country's hopes for meeting future energy requirements rested on development of its hydroelectric potential and offshore natural gas reserves.

In January 2004, National Petroleum Corp. of Namibia (Pty) Ltd. (Namcor) acquired a 10% interest in the offshore Kudu Gasfield, which is located 170 km offshore Oranjemund, from the South Africa-based, but Malaysian-owned Energy Africa Ltd., which retained a 90% interest. In May, Tullow Oil plc of Ireland acquired Energy Africa, and by July, Tullow had a development agreement, which proposed that gas from the Kudu Field be supplied to a proposed 800-MW power station that was to be built 25 km from Oranjemund, with Namibia Power Corp. (Pty) Ltd. in place.

In 2004, the Ministry held the fourth Petroleum Licensing Round, which was expected to attract additional international oil company interest, especially offshore. Bids closed in 2005.

Also in 2004, the venture between the First African Oil Corp. (a subsidiary of Circle Oil plc of the United Kingdom) (90% interest) and Namcor (10%) evaluated about 18 blocks in the onshore Owambo Basin of northern Namibia. Hunt Overseas Oil Co. (an affiliate of the Hunt Oil Co. of the United States) acquired a multiblock reconnaissance license in the offshore Lüderitz Basin, and INA Industrija nafte d.d. of Croatia evaluated its reconnaissance rights on 24 onshore blocks in southeastern Namibia. Vanco Energy Co. of the United States withdrew from blocks 1711A and 1711B (the Kunene Prospect), offshore northern Namibia. In November, Namcor acquired blocks 1711A and B and was seeking joint-venture partners.

## **Outlook**

The long tradition of mining in Namibia has been renewed with the reopening of the Tsumeb-area mines and smelter in 2000, the opening of the Skorpion zinc project in 2003, the expansion of fluorspar and gold mines, and the continued success of offshore diamond exploration and development. These successes and higher world commodity prices are encouraging further exploration for base metals, diamond, gold, and petroleum. Although offshore diamond production experienced some setbacks in recent years owing

to technical or business reasons, the potential for development of diamond resources remains strong, and production is expected to increase in 2005 and later. Such new mine developments and the potential for new value-added gemstone cutting and polishing, metal-processing, and other mineral-based manufacturing industries should maintain the minerals sector's position as a significant segment of the economy of Namibia for the foreseeable future.

The Government's ability to attract new investment to develop natural gas resources and to harness the hydroelectric power potential of the Kunene River will strongly influence future economic growth. In the longer run, greater development of the regional transportation infrastructure in northern Namibia, stimulated by the completion of the Trans Kalahari and Trans Caprivi highways, could see Walvis Bay become a significant export route for new mineral developments in Angola and in the landlocked countries of Botswana and Zambia. With a climate that is among the driest in the world, Namibia will continue to deal with the lack of water resources as a constraint on development.

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## Major Sources of Information

Association of Prospectors and Miners of Namibia

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Windhoek, Namibia

Telephone: (264) 61 34978

Fax: (264) 61 32809

The Chamber of Mines of Namibia

P.O. Box 2895

Windhoek, Namibia

Telephone: (264) 61 237-925/926

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Geological Survey of Namibia

Private Bag 2168

1 Aviation Road

Windhoek, Namibia

Telephone: (264) 61 208-5111

Fax: (264) 61 249-146

Internet: <http://www.gsn.gov.na>

**Ministry of Mines and Energy**

Private Bag 13297  
1 Aviation Road  
Windhoek, Namibia  
Telephone: (264) 61 226-571 or 284-8111  
Fax: (264) 61 238-643

**Ministry of Trade and Industry**

Private Bag 13340  
Windhoek, Namibia  
Telephone: (264) 61 229-933  
Fax: (264) 61 220-227  
Internet: <http://www.republicofnamibia.com>

**Namibia National Small Miners Association**

P.O. Box 7289  
Windhoek, Namibia  
Telephone: (264) 61 31088  
Fax: (264) 61 31188

**Major Publications**

Chamber of Mines of Namibia, Annual Report.

Geological Survey of Namibia, 1992. The Mineral Resources of Namibia, 598 p.

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TABLE 1  
NAMIBIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity	2000	2001	2002	2003	2004
<b>METALS</b>					
Arsenic, white, 99% arsenic trioxide	--	914	880	389	1,264
Copper:					
Mine output, concentrate (26% - 30% Cu):					
Gross weight	19,099	53,790	63,997	64,882 <sup>r</sup>	58,792
Cu content	5,620	12,393	18,012	16,175 <sup>r</sup>	11,174
Metal, blister: <sup>2</sup>					
From domestic concentrates	5,082	18,386	17,850	16,106	14,800 <sup>e</sup>
From imported toll concentrates	--	8,629	8,853	9,930	9,900 <sup>e</sup>
Total	5,082	27,015	26,703	26,036	24,704
Gold kilograms	2,417	2,706	2,815 <sup>r</sup>	2,508 <sup>r</sup>	2,205
Lead, mine output, concentrate:					
Gross weight	20,665	25,565	24,140	31,453	27,338
Pb content of Pb and Pb/Zn concentrates	11,114	12,088	13,809	18,782	14,338
Silver:					
Mine output, Ag content of concentrate kilograms	9,287	20,396	43,632	45,100	27,153
Metal, refined, primary <sup>2</sup> do.	8,790	18,150	12,020	18,140	14,815
Tantalite:					
Gross weight, concentrates	--	--	23 <sup>e</sup>	100 <sup>e</sup>	30 <sup>e</sup>
Ta content (36%)	--	--	8	36	11 <sup>e</sup>
Tin:					
Gross weight, concentrates	--	--	--	72	25 <sup>e</sup>
Sn content (60%)	--	--	--	43	15 <sup>e</sup>
Uranium, U <sub>3</sub> O <sub>8</sub>	3,201	2,640	2,751	2,401	3,583
Zinc, mine output, concentrate (49% - 54% Zn):					
Gross weight	73,535	70,923	77,587	107,920	123,372
Zn content of Zn and Pb/Zn concentrates	39,126	37,622	42,685	60,500	66,028
Metal, refined, primary <sup>2</sup>	--	--	35	47,436	120,533
<b>INDUSTRIAL MINERALS</b>					
Diamond, gem thousand carats	1,552	1,487	1,562	1,481	2,004
Fluorspar, acid grade (97% CaF <sub>2</sub> ) <sup>3</sup>	66,128	81,551	81,084	79,349	104,785
Gypsum	588	--	--	--	--
Salt	523,009	543,218	630,159	697,914	754,351
Semiprecious stones:					
Agate	96	138	190	123 <sup>r</sup>	158
Amethyst kilograms	4,850	4,500 <sup>e</sup>	4,500 <sup>e</sup>	300 <sup>r</sup>	41,367
Blue chalcedony do.	NA	NA	NA	124	69
Chrysocolla do.	--	2,685	13	-- <sup>e</sup>	--
Garnet do.	134	150 <sup>e</sup>	150 <sup>e</sup>	-- <sup>r</sup>	115
Picture stone	NA	NA	NA	326	240
Pietersite	20	5,370	--	11 <sup>r</sup>	9
Rose quartz	74	30	--	93 <sup>r</sup>	--
Sodalite	457	46	1,691	174 <sup>r</sup>	--
Tourmaline kilograms	390	--	--	218 <sup>r</sup>	102
Stone:					
Dolomite	--	19,593	--	15,401 <sup>r</sup>	13,536
Granite	7,222	5,723	24,754	27,456 <sup>r</sup>	25,492
Marble	24,426	18,337	3,182	4,523 <sup>r</sup>	8,356
Sodalite	--	--	NA	704	138
Sulfur, pyrite concentrate:					
Gross weight (49% - 51% S)	11,967	68,674	3,633	31,786	3,658
S content	5,704	34,491	1,874	16,390	1,835
Wollastonite	441	284	742	585 <sup>r</sup>	406

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits; may not add to total shown. NA not available. <sup>r</sup>Revised. --Zero.

<sup>1</sup>Table includes data available through October 2005.

<sup>2</sup>Includes products of imported concentrate.

<sup>3</sup>Fluorspar production shown in wet metric tons; approximately 9% moisture.

TABLE 2  
NAMIBIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2004

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners		Location of main facilities	Annual capacity
Arsenic		Ongopolo Mining and Processing Ltd.		Plant at Tsumeb smelter	1,000 refined arsenic trioxide.
Copper: Ore		do.		Ojithase copper mine, near Tsumeb	12,000 copper in concentrates; 32,000 pyrite concentrates.
Do.		do.		Komabat copper mine, 50 kilometers south of Tsumeb	8,000 copper in concentrates.
Do.		do.		Tsumeb West Mine	4,000 copper in concentrates.
Metal		do.		Copper smelter at Tsumeb	30,000 blister copper; 20 silver; 200 kilograms gold.
Diamond:					
Mining		carats	Namdeb Diamond Corp. (Pty.) Ltd. (Government, 50%, and De Beers Centenary AG, 50%)	Mining Area 1, from Orange River to 145 kilometers north of Oranjemund, includes Pocket Beach Site 2	800,000.
Do.		do.	do.	Orange River Mines, from mouth of Orange River east to Sendelingsdrif; includes the Daberas Mine	120,000.
Do.		do.	do.	Northern Areas and Elizabeth Bay Mines, 24 kilometers south of Luderitz	180,000.
Do.		do.	do.	Beach and Marine contractors	25,000.
Do.		do.	De Beers Marine Namibia (De Beers Centenary AG, 70%, and Namdeb Diamond Corp. (Pty.) Ltd., 30% )	Atlanta 1 license area, offshore of Sperrgebiet	850,000.
Do.		do.	Sakawe Mining Corp. (LL Mining Corp. BV of Israel)	Offshore near Luderitz Bay	100,000.
Do.		do.	Diamond Fields (Pty.) Ltd. of Namibia (Diamond Fields International Ltd. of Canada, 100%)	Mining License 111, offshore Luderitz	53,000. <sup>1</sup>
Do.		do.	Diaz Exploration (Pty.) Ltd.	Marine mining	15,000.
Do.		do.	Storm Diamond Mining (Pty.) Ltd., (Reefion Mining NL of Australia, 100%)	Beach terrace deposits, Skeleton Coast (Production from ongoing exploration activity)	350.
Processing		do.	Hard Stone Processing (Seber NV, 100%)	Diamond cutting and polishing plant at Windhoek	NA.
Do.		do.	LLD Diamonds Namibia (Levie Group of Israel, 100%)	Diamond cutting and polishing plant at Windhoek	150,000 carats.
Do.		do.	Mars Investment Holding (Pty.) Ltd.	Diamond cutting and polishing plant at Walvis Bay	NA.
Do.		do.	NamCot Diamonds (Pvt.) Ltd. (Steinmetz Group, 100%)	Diamond cutting and polishing plant at Okahandja, 70 kilometers north of Windhoek	NA.
Do.			NamDiamonds Inc.	Diamond cutting and polishing plant at Windhoek	Closed.
Do.		do.	NamGem Diamond Manufacturing Co. (Pty.) Ltd. (Namdeb, 100%)	Diamond cutting and polishing plant at Okahandja	50,000 stones.
Do.		do.	Tornado Enterprises (Kurashkin, Slatkov, 100%)	Diamond cutting and polishing plant at Windhoek	NA.
Fluorspar		do.	Okorusu Fluorspar (Pty.) Ltd.	Mine and plant at Okorusu	105,000 acid-grade fluorite.
Gold		kilograms	Anglogold (Pty.) Ltd. of Namibia	Navachab Gold Mine	2,500
Salt:			Salt Company (Pty.) Ltd.	Swakopmund	120,000.
Do.			Salt & Chemicals Ltd.	Salt pan at Walvis Bay	650,000.
Do.			Walvis Bay Salt Refiners (Pty.) Ltd.	Salt refinery at Walvis Bay	650,000.
Do.			Cape Cross Salt (Pty.) Ltd.	NA.	15,000.
Tantalite			Albaca Mining Co. [Central African Mining & Exploration Co. (United Kingdom), 100% <sup>2</sup> ]	Three Aloes Mine, 10 kilometers south of Uis	36 tantalite concentrates.
Do.			IMG Tantalum [AFB Exploration (Pty.) Ltd. (Germanv)]	Mine in Tantalite Valley in Karas region, north of Orange River	Closed.

See footnotes at end of the table.

TABLE 2--Continued  
NAMIBIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2004

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Uranium	Rössing Uranium Ltd. (Rio Tinto Group, 68.6%; Government of Iran, 15%; Industrial Development Corp. of South Africa Ltd., 10%; Government of Namibia, 3.5%)	Rössing Mine, 65 kilometers northeast of Swakopmund	4,800 uranium oxide.
Wollastonite	Namibia Mineral Development Co. (Pty.) Ltd.	Uskos Mine	800 wollastonite; 20,000 dolomite. <sup>c</sup>
Zinc:			
Mine	Rosh Pinah Zinc Corp. (Pty.) Ltd. (Kumba Resources Ltd., 100%)	Rosh Pinah Mine, near Rosh Pinah	110,000 zinc in concentrates; 20,000 lead in concentrates; 25 silver in concentrates.
Do.	Skorpion Mining Co. (Anglo American plc, 100%)	Skorpion Mine, 25 kilometers north of Rosh Pinah	1,500,000 ore.
Metal	Namzinc (Pty.) Ltd. (Anglo American plc, 100%)	Skorpion solvent extraction facilities and electrowinning refinery, 25 kilometers north of Rosh Pinah	150,000 refined zinc.

<sup>c</sup>Estimated. NA Not available.

<sup>1</sup>In joint venture with contract miner, Samicor Mining Services (Pty.) Ltd.. Joint venture ended in October 2004.

<sup>2</sup>Divested interest in early 2005.